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# Western Bean Cutworm Monitoring Project in Northwest IA

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**Abstract**
The western bean cutworm (WBC) has typically been an occasional pest of corn in northwest Iowa, and is more notably known to cause damage to crops in western Nebraska. Yet, beginning in 1999, the WBC has caused economic damage to corn in isolated locations of northwest Iowa, primarily in northern Ida County. Most recently, western bean cutworm moths and injury to corn have been found in most northwest Iowa counties. Because of the western bean cutworm's potential to cause large yield losses in corn and its presence in successive years, ISU extension researchers initiated a multi-county pheromone trapping project. Information from this effort can be used to determine how widespread the pest is and to aid in scouting and treatment recommendations.

**Disciplines**
Agricultural Science | Agriculture

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## Introduction

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## Materials and Methods

2003 was the second year in which a large WBC trapping effort was conducted across several of Iowa's counties. Pheromone and black-light (one) traps were placed in northwest Iowa counties in early July 2003 (Figure 1).

## Results and Discussion

The first moths were caught July 1, and the peak moth flight occurred July 25 (Figure 2), about three days later than observed in 2002 (Figure 3). The moth flight extended through August 10 in 2002 and 2003 (Figures 2 and 3). The average daily moth catch/trap in 2003 was much less than in 2002, with the moth catch on the peak day of 2003 being only 35% of the count on 2002's peak day. Moth catch duration was also shorter in 2003. Moth catch (for days that totaled at least 25% of the peak day) extended for 14 days (July 20–August 3) in 2003 compared with 20 days (July 14–August 4) in 2002.

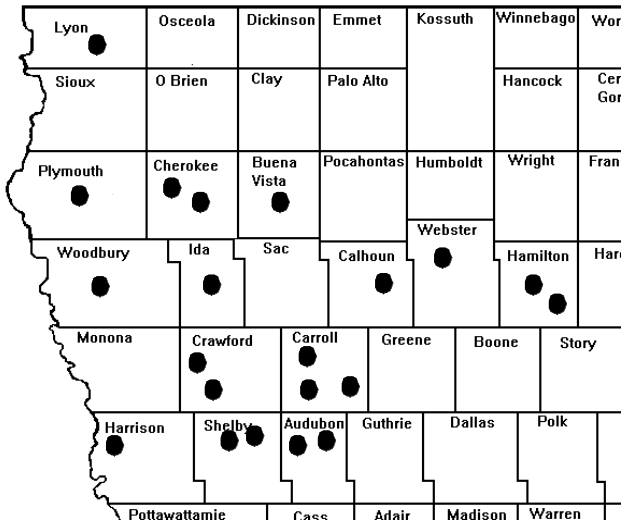
Scouting recommendations from the University of Nebraska state that even though field scouting for western bean cutworm should begin when the first moths are caught, control decisions should be made shortly after moth flight peaks. More information on scouting and treatment recommendations for the WBC can be obtained from the following URL: http://www.ianr.unl.edu/pubs/insects/g1359.htm

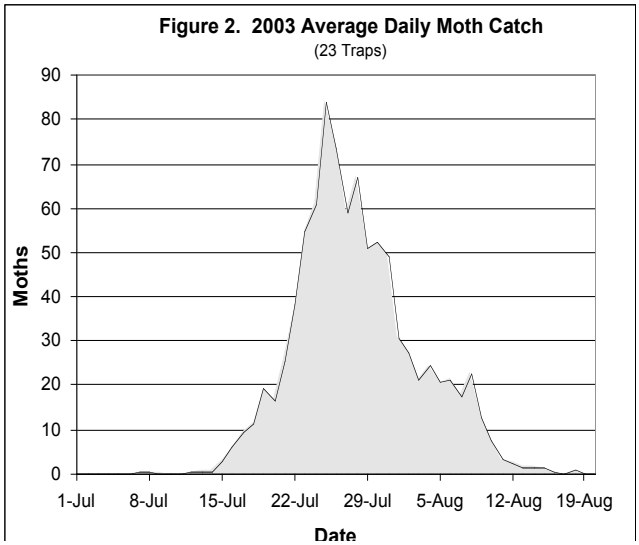
Trap data for individual locations can be observed at the following URL: http://latrodectus.ent.iastate.edu/westernbeancutworm/

## Acknowledgments

Much appreciation is extended to the many participants who set up and monitored traps throughout July and August.

**Figure 1. Northwest Iowa Trap Locations**





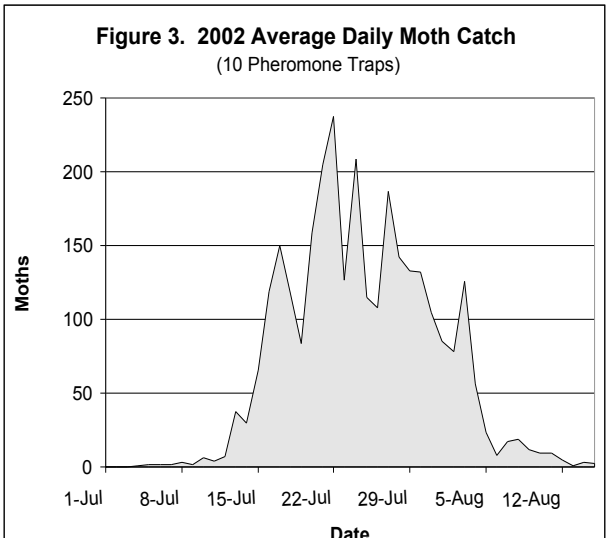




**Table 1. Western bean cutworm pheromone and black-light trap location, catch and emergence data for northwest Iowa, 2003.**

| County | Nearest town | Trap type | Total catch | Date of 25% moth catch | Date of 50% moth catch |
|---|---|---|---|---|---|
| Audubon (1) | Fiscus | Pheromone | 1872 | July 22 | July 25 |
| Audubon (2) | Fiscus | Pheromone | 919 | | |
| Buena Vista | Alta | Pheromone | 461 | July 25 | July 27 |
| Calhoun | Lake City | Pheromone | 526 | July 23 | July 26 |
| Carroll (1) | Templeton | Pheromone | 847 | | |
| Carroll (2) | Templeton | Pheromone | 346 | | |
| Carroll | Coon Rapids | Pheromone | 143 | | |
| Cherokee | Cleghorn | Pheromone | 1514 | July 28 | July 31 |
| Cherokee | Marcus | Pheromone | 1185 | | |
| Crawford (1) | Vail | Pheromone | 358 | July 22 | July 25 |
| Crawford (2) | Vail | Pheromone | 676 | | |
| Crawford (1) | Aspinwall | Pheromone | 1144 | | |
| Crawford (2) | Aspinwall | Pheromone | 743 | | |
| Hamilton (1) | Webster City | Pheromone | 237 | July 19 | July 21 |
| Hamilton (2) | Webster City | Pheromone | 247 | | |
| Harrison | Modale | Pheromone | 131 | July 26 | July 28 |
| Ida | Galva | Black Light | 958 | July 25 | July 28 |
| Lyon | Inwood | Pheromone | 757 | July 25 | July 29 |
| Plymouth | LeMars | Pheromone | 994 | July 25 | July 26 |
| Shelby (1) | Irwin | Pheromone | 1531 | July 22 | July 25 |
| Shelby (2) | Irwin | Pheromone | 997 | | |
| Webster | Barnum | Pheromone | 1131 | July 23 | July 25 |
| Woodbury | Pierson | Pheromone | 1318 | July 26 | July 28 |